NINDS CDE Notice of Copyright Timed Up and Go (TUG)

Availability:	Freely available on the Rehabilitation Measures Database website: Rehabilitation Measures Database.
Classification:	Supplemental: Amyotrophic Lateral Sclerosis (ALS), Cerebral Palsy (CP), Facioscapulohumeral Muscular Dystrophy (FSHD), Huntington's Disease (HD), Multiple Sclerosis (MS), Myotonic Dystrophy (DM), Neuromuscular Disease (NMD) and Spinal Cord Injury (SCI)-Pediatric (age 3 and over) Exploratory: Congenital Muscular Dystrophy (CMD), Spinal Muscular Atrophy
	(SMA)
Short Description of Instrument:	Construct measured: Functional independence and fall risk.
	Generic vs. disease specific: Generic.
	Means of administration: Examiner administered.
	Intended respondent: Administrator.
	Background: The original purpose of the TUG was to test basic mobility skills of frail elderly patients. The TUG has been used in other populations, including patients with arthritis, stroke and vertigo. The original Get Up and Go Test used an ordinal scoring system based on the observer's assessment of the patient's risk of falling. The subject wears their regular footwear and uses their customary walking aid (none, cane, walker). No physical assistance is given. The subject walks through the test once before being timed in order to become familiar with the test. Either a stopwatch or a wristwatch with a second hand can be used to time the trial.
Comments/Special instructions:	Scoring: The timed "Up and Go" test measures, in seconds, the time taken by an individual to stand up from a standard arm chair (approximate seat height of 46 cm [18in], arm height 65 cm [25.6 in]), walk a distance of 3 meters (118 inches, approximately 10 feet), turn, walk back to the chair, and sit down. Patients are timed (in seconds) when performing the TUG—3 conditions: 1. TUG alone-from sitting in a chair, stand up, walk 3 meters, turn around, walk back, and sit down. 2. TUG Cognitive-complete the task while counting backwards from a randomly selected number between 20 and 100. 3. TUG manual-complete the task while carrying a full cup of water. The time taken to complete the task is strongly correlated to level of functional mobility, (i.e,. the more time taken, the more dependent in activities of daily living).
	Administration: 15 minutes or less.

NINDS CDE Notice of Copyright Timed Up and Go (TUG)

Rationale/ Justification:

Strengths/Weaknesses: The cutoff levels for TUG is 13.5 seconds or longer with an overall correct prediction rate of 90%; for TUG manual is 14.5 seconds or longer with a 90% correct prediction rate; and TUG cognitive is 15 seconds or longer with an overall correct prediction rate of 87%.

Psychometric Properties: Inter-rater reliability is high with a same day, three-rater intra-class correlation coefficient of 0.992. Intra-rater reliability over longer periods (up to 132 days) is not as high with a reliability of 0.749. Test-retest (2–7 days) standard error of measurement has been measured as 1 second. Moderate to high correlations observed with scores on Berg Balance Scale, gait speed, stair climbing and Barthel Index of Activities of Daily Living Scale.

SCI-Pediatric specific: Studies investigating typically developing children as well as children with cerebral palsy and traumatic brain injury found it is a good tool to assess mobility in the pediatric population, as young as 3 years of age. The child must be able to follow directions. It has not been evaluated specifically with children with SCI.

References:

Key Reference:

Podsiadlo D & Richardson S. The timed "Up & Go": a test of basic functional mobility for frail elderly persons. J Am Geriatr Soc. 1991;39(2):142–148.

Additional Reference:

Wall JC, Bell C, Campbell S, Davis J. The Timed Get-up-and-Go test revisited: measurement of the component tasks. J Rehabil Res Dev. 2000;37(1):109–113.

HD References:

Mathias S, Nayak US, Isaacs B. Balance in elderly patients: the "get-up and go" test. Arch Phys Med Rehabil. 1986;67(6):387–389.

Podsiadlo D, Richardson S. The timed "Up & Go": a test of basic functional mobility for frail elderly persons. J Am Geriatr Soc. 1991;39(2):142–148.

Rao AK, Muratori L, Louis ED, Moskowitz CB, Marder KS. Clinical measurement of mobility and balance impairments in Huntington's disease: validity and responsiveness. Gait Posture. 2009;29(3):433–436.

SCI-Pediatric References:

Nicolini-Panisson RD & Donadio MV. Timed "Up & Go" test in children and adolescents. Rev Paul Pediatr. 2013;31(3):377–383.

Williams EN, Carroll SG, Reddihough DS, Phillips BA, Galea MP. Investigation of the timed 'up & go' test in children. Dev Med Child Neurol. 2005;47(8):518–524.